SiFive

IP and SOC Panel

SiFive: Leading the Open Hardware Revolution

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April 9 2019

SiFive: The "Red Hat" of Open Hardware

SiFive Benefits

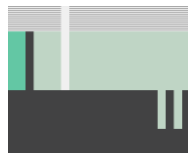|	
RISC-V	**Inventors of the RISC-V ISA** **Leaders in commercial RISC-V Core IP**
Chips and applications	**Enablement and Support for building RISC-V SoCs and applications**
Customization	*Have it Your Way:* **Configure/Customize your IP**

Testimonials

"RISC-V opens up processor design. Open source has comprehensively changed the world of software. RISC-V wants to do the same for processors"
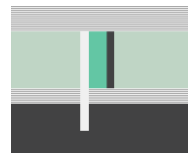**– Rupert Goodwins | ZDnet**

"SiFive's RISC-V Core IP was 1/3 the power and 1/3 the area of competing solutions, and gave FADU the flexibility we needed in optimizing our architecture to achieve these groundbreaking products"
– Jihyo Lee | FADU
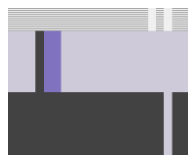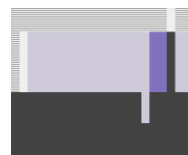
E3 Series
High-performance 32-bit MCU cores

E31 Core   **E34 Core**

S5 Series
64-bit performance, 32-bit price and area

S51 Core   **S54 Core**

U5 Series
64-bit Linux capable application processors

U54 Core   **U54-MC Core**

All RISC-V core products are delivered via web-based GUI **SiFive Core Designer**

Customers can choose preset Standard Core options or create and save their own configurations

The **release candidates** are generated with a single click and available in 24 hours after verification
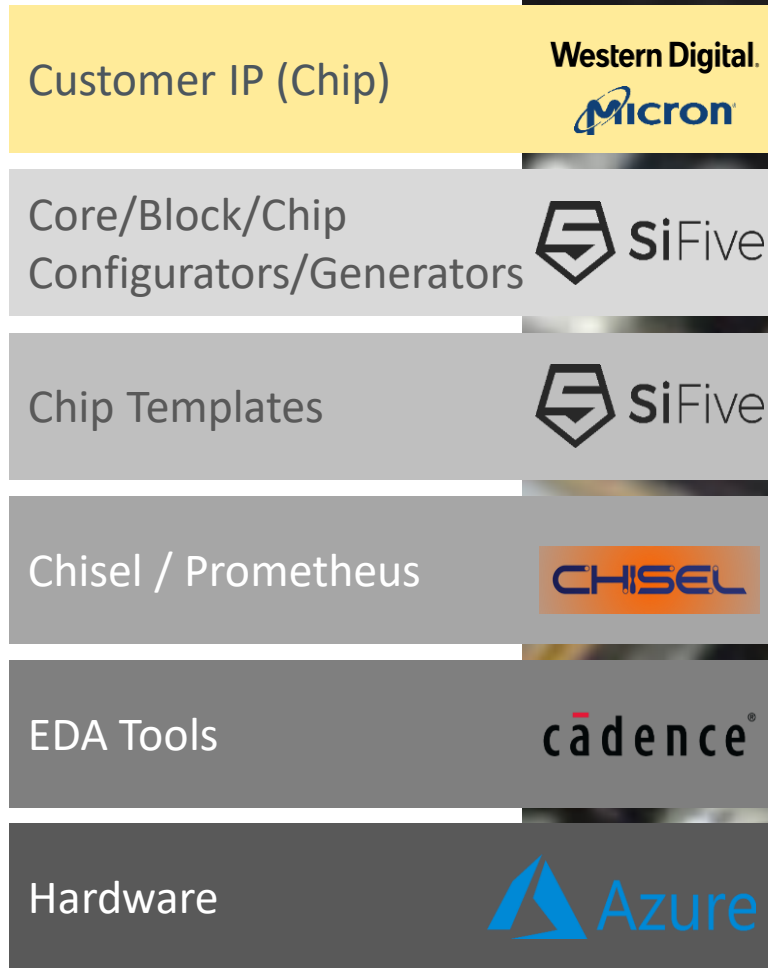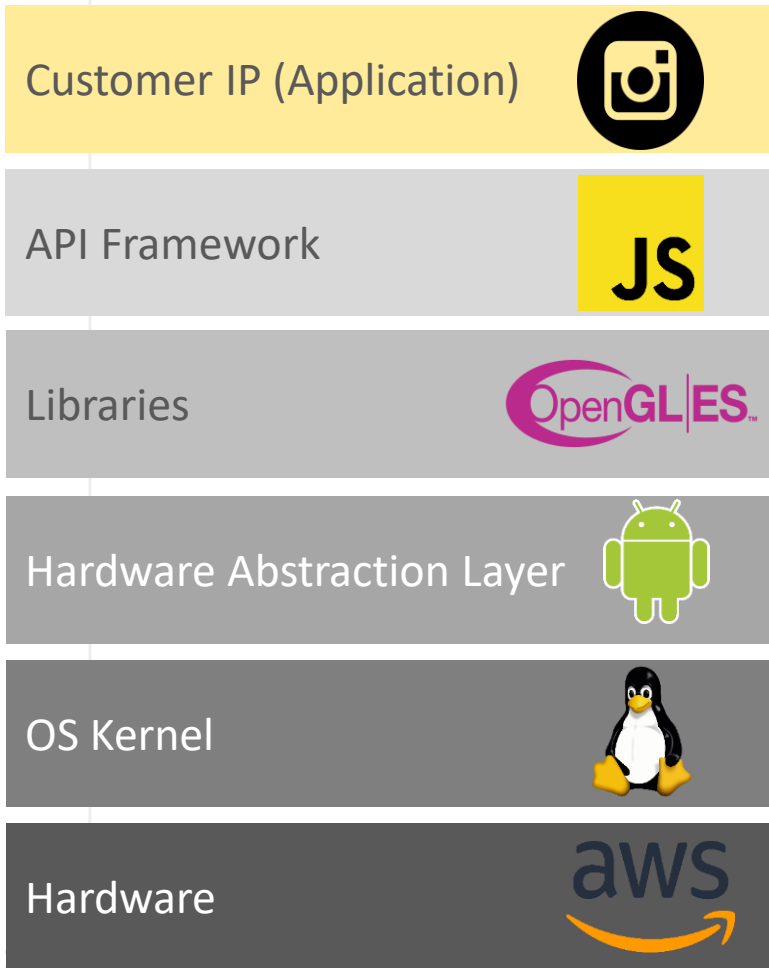
Visit sifive.com   **Contact** sunil@sifive.com

Software stack

Customer IP (Application)	Instagram
API Framework	JS
Libraries	OpenGL|ES
Hardware Abstraction Layer	Android
OS Kernel	Linux
Hardware	aws

Source: Google Developers

"Hardware stack"

Customer IP (Chip)	Western Digital / Micron
Core/Block/Chip Configurators/Generators	SiFive
Chip Templates	SiFive
Chisel / Prometheus	CHISEL
EDA Tools	cadence
Hardware	Azure

Foundry / OSAT

Innovators focus on high-level work

"Hardware Stack" Disrupting the Silicon Business at Software Speed

DesignShare Enables Rapid Scaling of IP Pool Needed to Build Templates

IP Easily Integratable

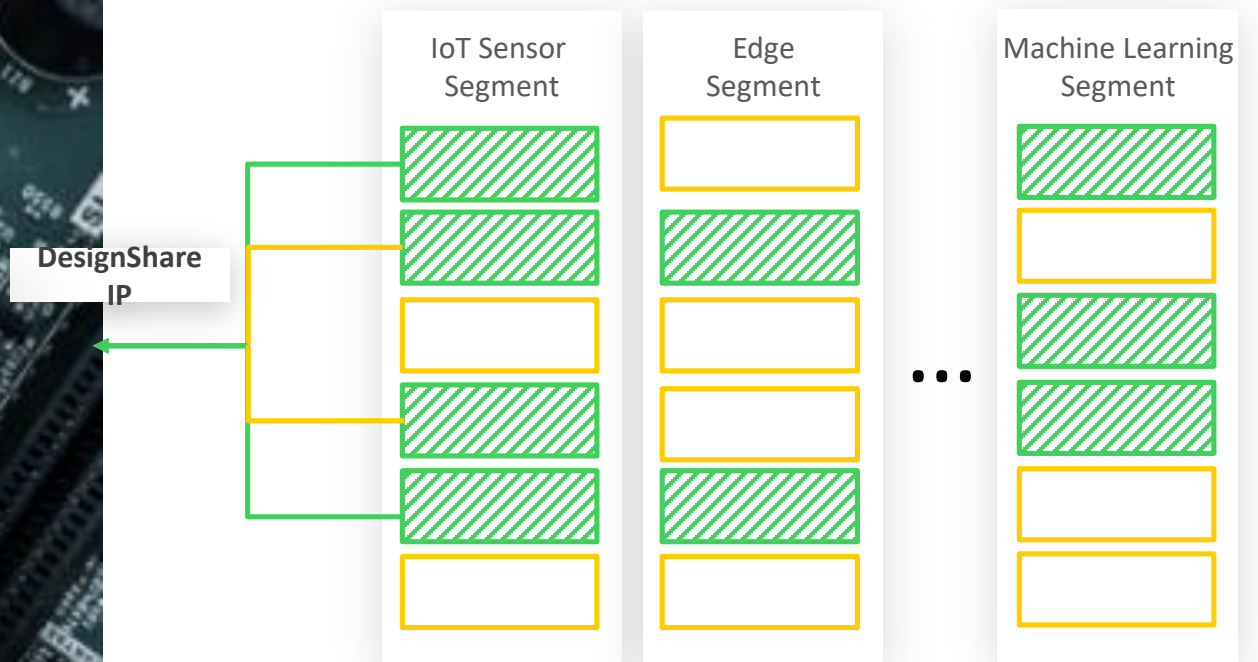**01** DesignShare Partners provide their IP for SiFive Freedom Platform at zero cost

02 Benefit to DesignShare Partners
- Increase number of design starts
- IP Protection
- SiFive collects NRE/Royalties in production

03 Benefits to Customers
- Reduces expertise needed
- Single contract/NDA

IoT Sensor Segment	Edge Segment	Machine Learning Segment

DesignShare IP

Rambus

Think Silicon
ultra-low power | vivid graphics

ANALOG BITS

DOVER
MICROSYSTEMS

ultraSOC

flexlogix
Technologies, Inc.

BRite
semiconductor

terminus circuits
Innovative solutions

mobiveil
Investors in Innovation™

ememory

Corigine

chipus

20+ more in pipeline